UNITED STATES PATENT AND TRADEMARK OFFICE

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09/420,457	10/18/1999	TAKESHI YAMAMOTO	32032	2834

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EXAMINER
CLINTON, GREGORY L

ART UNIT	PAPER NUMBER
2154	

DATE MAILED: 09/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

	Application No.		**Applicant(s)**
Office Action Summary	09/420,457		YAMAMOTO, TAKESHI
	Examiner		**Art Unit**
	Gregory L. Clinton		2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 October 1999* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

        1.☒ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____ .

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a)☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4)☐ Interview Summary (PTO-413) Paper No(s). _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: .

1.   Claims 1 – 30 are pending.

2.   The disclosure is objected to because of minor informalities. Throughout the disclosure

the plural form of verbs is used instead of the singular form (see p. 1, col. 15.) Grammatically

incorrect sentences are used throughout the specification (see p. 1, lines 22 – 24: "In addition, the

screens of the image information are varied in size every content.") In addition, words, such as

the verb 'analyze', are misused consistently. See, for example, p. 17, lines 15 – 17: "When the

protocol processing means analyzes that the transmission of the image information from the

content server has been completed..."

This listing of informalities is intended to be exemplary, not exhaustive. The applicant

should carefully review the specification for additional problems.

3.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
> subject matter which the applicant regards as his invention.

4.   Claims 3, 10, 11, and 26 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

5.   As to claims 3 and 10, the "whereby" clause is conclusive in that it recites a desired goal

or end result which does not necessarily follow from the definitions set forth in the body of

claim. The claim is thus functional (see MPEP 706.03 (c)). It has been held that the functional

"whereby" statement does not define any structure and accordingly can not serve to distinguish.

In re Mason, 114 USPQ 127, 44 CCPA 937 (1957).

6.   As to claims 11 and 26, the term "mobile terminals" lacks antecedent basis in the claims.

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8.   Claims 1 – 6, 8 – 11, 16 – 21, and 23 - 26 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Basu et al., U.S. Patent No. 6,097,733, in view of Zhang et al., U.S. Patent No.

6,181,711, further in view of Hooper et al., U.S. Patent No. 5,414,455.

9.   As to claims 1 and 16, Basu teaches an Internet interface means for establishing an

interface with the Internet (col. 3, lines 32 – 35) and mobile interface means for establishing an

interface with a mobile network (col. 6, lines 8 – 12.) However, Basu does not specifically teach

a protocol processing means for applying a protocol process to information which are processed

by the Internet interface means and the mobile interface means; and an image information edit

processing means for editing image information which is extracted by the protocol processing

means into image information suitable for mobile communication.

10.   Zhang teaches a protocol processing means for applying a protocol process to
information (Fig.4, reference characters 400 – 410; col. 9, lines 60 - 63); and an image
information edit processing means for editing image information which is extracted by the
protocol processing means into image information suitable for mobile communication (col. 10,
lines 31 – 40.)

11.   It would have been obvious to one of ordinary skill in the art at the time the invention
was made to combine the teachings of Zhang with Basu because Zhang's protocol processing
and information edit processing enables the system to reduce the bit error rate of digital video
(Zhang, col. 4, lines 12 – 16.)

12.   The combination of Zhang and Basu fails to teach a storage unit for storing the image
information which is edited by the image information edit processing means and a storage unit
controlling means for controlling to store the image information in the storage unit and to read
the stored image information.

13.   Hooper teaches a storage unit for storing the image information which is edited by the
image information edit processing means (col. 12, lines 23 – 24) and a storage unit controlling
means for controlling to store the image information in the storage unit and to read the stored
image information (col. 12, lines 24 – 25.)

14.   It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Hooper with the combination of Basu and Zhang because

Hooper's storage unit and storage unit controller enables the system to provide interactive

control of the image information, increasing the system's functionality (Hooper, col. 1, lines 28 –

30.)

15.   As to claims 2 and 17, the combination of Basu, Zhang, and Hooper, teach that the image

information which are transmitted/received in respective interfaces of said Internet interface

means, said mobile interface means, said protocol processing means, said image information edit

processing means, and said storage unit controlling means are communicated in a cellulated

format (Zhang, col. 3, lines 6 – 10.)

16.   As to claims 3 and 18, the combination of Basu, Hooper, and Zhang teach the invention

as claimed with respect to claim 1 above. Basu further teaches a mobile protocol reception

processing means for receiving information from the mobile network and then informing the

protocol processing means (Fig. 3, reference characters 304, 306) and a mobile protocol

transmission means for transmitting information from the protocol processing meands and the

storage unit controlling means to the mobile network via a transmission process (Fig. 3,

reference characters 310, 312.) However, Basu does not teach a transmission timing control

processing means for informing the storage unit controlling means of a transmission timing so as

to transmit the image information continuously every unit time, whereby continuous

reproduction of the image information for the mobile network can be achieved based on such

information of the transmission timing to the storage unit controlling means.

17.   Zhang teaches a transmission timing control processing means for informing the storage

unit controlling means of a transmission timing so as to transmit the image information

continuously every unit time (col. 18, lines 8 – 10), whereby continuous reproduction of the

image information for the mobile network can be achieved based on such information of the

transmission timing to the storage unit controlling means (col. 18, lines 9 - 11.)

18.   It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Zhang with Basu because Zhang's timing enables the

system to reduce transmission delays (Zhang, col. 4, lines 12 – 16.)

19.   As to claims 4 and 19, the combination of Basu, Zhang, and Hooper teaches an Internet

protocol reception processing means for performing a communication process of the information

received from the Internet (Basu, Fig. 5, reference character 510) and then informing the

protocol processing means; and an Internet protocol transmission processing means for

transmitting the information received from the protocol processing means to the Internet (Basu,

Fig. 5, reference character 504.)

20.   As to claims 5 and 20, the combination of Basu, Zhang and Hooper teaches that said

Internet interface means includes an interface for cellulating the information to communicate

communication information and the image information when the Internet protocol reception

processing means and the Internet protocol transmission processing means communicate with the

protocol processing means (Basu, col. 10, lines 52 – 54.)

21.   As to claims 6 and 21, the combination of Basu, Zhang, and Hooper teaches an Internet

protocol address analysis processing means for analyzing that the information from the Internet

interface means correspond to either of communication information and image information

(Zhang, col. 10, lines 6 – 9); an image information protocol processing means for executing a

protocol process of the image information from Internet protocol address analysis processing

means (Zhang, col. 10, lines 20 – 22); a data reproduction processing means for processing the

image information which are protocol-processed by the image information protocol processing

means to reproduce original information (Zhang, col. 10, lines 27 – 30); and a communication

network protocol processing means for protocol-processing the information supplied to the

Internet and the mobile network (Zhang, col. 10, lines 58 – 62.)

22.   As to claims 8 and 23, the combination of Basu, Zhang, and Hooper teach the invention

as claimed with respect to claims 3 and 18. The combination further teaches an asynchronous

information processing means for processing asynchronous communication information from the

protocol processing means (Basu, col. 10, lines 41 – 42); a synchronous information processing

means for processing synchronous image information from the storage unit controlling means

(Basu, col. 10, lines 42 – 44); a transmission buffer for transmitting the information to the mobile

network (Basu, col. 10, lines 66 – 67); and an information write controlling means for controlling

to write the image information from the synchronous information processing means into the

transmission buffer (Basu, col. 13, lines 37 – 39.) However, Basu does not specifically teach that

the image information processed by the synchronous information processing means are

transmitted to the mobile network prior to the communication information so as to allow

continous reproduction of the image information.

23.   Nevertheless, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the combination of Basu, Zhang, and Hooper such that the image

information processed by the synchronous information processing means are transmitted to the

mobile network prior to the communication information so as to allow continous reproduction of

the image information because such a modification would enable the system to reduce the

likelihood of excessive and jittery delays (Zhang, col. 2, lines 60 – 67.)

24.   As to claims 9 and 24, the combination of Basu, Zhang, and Hooper teach the invention

as claimed with respect to claims 1 and 16 above. Zhang further teaches an edit data split

processing means for splitting edited information edited by the image information processing

means into cellulated information (col. 18, lines 34 – 36.) However, Zhang fails to teach a

storage unit managing means for managing reading process/writing process from/into the storage

unit; a data storage processing means for instruction the storage unit managing means of writing

of split data edited by the edit data split processing means; and a data read processing means for

instructing the storage unit managing means of reading in response to a reading timing

instruction issued from the mobile interface means.

25.   Hooper teaches a storage unit managing means for managing reading process/writing

process from/into the storage unit (col. 11, lines 35 – 38); a data storage processing means for

instruction the storage unit managing means of writing of split data edited by the edit data split

processing means (col. 11, lines 33 – 34, 38 – 40); and a data read processing means for

instructing the storage unit managing means of reading in response to a reading timing

instruction issued from the mobile interface means (col. 11, lines 45 – 48.)

26.   It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Hooper with Zhang for the reasons given above in

paragraph 14.

27.   As to claims 10 and 25, Basu teaches a mobile interface means for establishing an

interface with a mobile network (col. 6, lines 8 – 12.)

28.   However, Basu fails to teach a protocol processing means for processing protocol of

information supplied from the mobile terminal and processed by the mobile interface means.

29.   Zhang teaches a protocol processing means for processing protocol of information

supplied from the mobile terminal and processed by the mobile interface means (Fig.4, reference

characters 400 – 410; col. 9, lines 60 - 63.)

30.   It would have been obvious to one of ordinary skill in the art at the time the invention
was made to combine the teachings of Basu with Zhang for the reasons given above in paragraph
11.

31.   The combination of Basu and Zhang fails to teach a storage unit for storing the image
information and a storage unit controlling means for controlling to read the stored image
information, wherein the image information read from the storage unit is supplied constantly to
the mobile network to deliver broadcast.

32.   Hooper teaches teach a storage unit for storing the image information (col. 12, lines 23 –
24) and a storage unit controlling means for controlling to read the stored image information
(col. 12, lines 24 – 25.), wherein the image information read from the storage unit is supplied
constantly to the mobile network to deliver broadcast (col. 11, lines 44 – 48.)

33.   It would have been obvious to one of ordinary skill in the art at the time the invention
was made to combine the teachings of Hooper with the combination of Basu and Zhang for the
reasons given above in paragraph 14.

34.   As to claims 11 and 26, Basu teaches mobile interface means for establishing an interface
with a mobile network (col. 6, lines 8 – 12) wherein image information is communicated
between the mobile terminals (col. 2, lines 4 – 7, 18 – 23.) However, Basu does not teach a
protocol processing means for processing protocol of image information from the mobile

terminal; and an image information edit processing means for editing image information into

edited information suitable for mobile communication.

35.   Zhang teaches a protocol processing means for processing protocol of image information

from the mobile terminal (Fig.4, reference characters 400 – 410; col. 9, lines 60 - 63); and an

image information edit processing means for editing image information into edited information

suitable for mobile communication (col. 10, lines 31 – 40.)

36.   It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Basu with Zhang for the reasons given above in paragraph

11.

37.   The combination of Basu and Zhang fail to teach a storage unit for storing the image

information which is edited by the image information edit processing means and a storage unit

controlling means for controlling to store the image information in the storage unit and to read

the stored image information.

38.   Hooper teaches a storage unit for storing the image information which is edited by the

image information edit processing means (col. 12, lines 23 – 24) and a storage unit controlling

means for controlling to store the image information in the storage unit and to read the stored

image information (col. 12, lines 24 – 25.)

39.   It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Hooper with the combination of Basu and Zhang for the

reasons given above in paragraph 14.

40.   Claims 7 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over the

combination of Basu, Zhang, and Hooper as applied to claims 1 and 16 above, and further in

view of Shaw et al., U.S. Patent No. 6,356,945.

41.   As to claims 7 and 22, the combination of Basu, Zhang, and Hooper teach the invention

as claimed with respect to claims 1 and 16 above. However, the combination does not

specifically teach a reproduced data storage unit for storing the image information reproduced by

the protocol processing means; a received data managing means for managing writing/reading of

reproduced data into/from the reproduced data storage unit; and a reproduced data editing means

for editing the reproduced data read from the reproduced data storage unit into a format which is

suitable for the mobile terminal.

42.   Shaw teaches a reproduced data storage unit for storing the image information

reproduced by the protocol processing means (col. 3, lines 63 – 65); a received data managing

means for managing writing/reading of reproduced data into/from the reproduced data storage

unit (col. 5, lines 33 – 36); and a reproduced data editing means for editing the reproduced data

read from the reproduced data storage unit into a format which is suitable for the mobile terminal

(col. 4, lines 1 – 5.)

43.   It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Shaw with the combination of Basu, Zhang, and Hooper

because Shaw's data reproduction improves the efficiency of the apparatus (Shaw, col. 1, lines

49 – 53.)

44.   Claims 12 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaw.

45.   As to claims 12 and 27, Shaw teaches the invention as claimed, including an image

information processing means for converting plural types of image information formats, into a

common image information format, which can be handled commonly (col. 3, line 60 – col. 4,

line 5.) However, Shaw fails to teach that the plural types of image information formats are

handled by respective terminals or that the common image information format can be handled

commonly in communication with the mobile network.

46.   Nevertheless, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the invention of Shaw because such a modification would permit

mobile networks and mobile terminals to convey live video in an efficient and effective

architecture (Shaw, col. 1, lines 49 – 53.)

47.   Claims 13 – 15 and 28 - 30 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Basu in view of Zhang, further in view of Shaw.

48.   As to claims 13 and 28, Basu teaches a mobile interface means for establishing an

interface with a mobile network in communication with a mobile network (col. 6, lines 8 – 12)

wherein image information is communicated between the mobile terminals (col. 2, lines 4 – 7, 18

– 23.) However, Basu does not teach protocol processing means for processing protocol of image

information from the mobile terminal.

49.   Zhang teaches protocol processing means for processing protocol of image information

from the mobile terminal (Fig.4, reference characters 400 – 410; col. 9, lines 60 – 63.)

50.   It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Basu with Zhang for the reasons given above in paragraph

11.

51.   The combination of Basu and Zhang fails to teach an image information conversion

processing means for converting the image information into a common image information

format; a storage unit for storing converted image information; a storage unit controlling means

for controlling to store the image information into the storage unit and to read stored image

information; or an image information custom processing means for editing the image information

into the image information which is suitable for respective mobile terminals.

52.   Shaw teaches an image information conversion processing means for converting the

image information into a common image information format (col. 3, lines 62 – 65); a storage unit

for storing converted image information (col. 3, line 38, 64 – 65); a storage unit controlling

means for controlling to store the image information into the storage unit and to read stored

image information (col. 7, lines 43 – 47); and an image information custom processing means for

editing the image information into the image information read from the storage unit which is

suitable for respective mobile terminals (col. 3, line 65 – col. 4, line 5.)

53.   It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Shaw with the combination of Basu and Zhang because

Shaw's converstion, storage, and custom processor improves the efficiency of the apparatus

(Shaw, col. 1, lines 49 – 53.)

54.   As to claims 14 and 29, Basu teaches a mobile interface means for establishing an

interface with a mobile network in communication with a mobile network (col. 6, lines 8 – 12)

wherein image information is communicated between the mobile terminals (col. 2, lines 4 – 7, 18

– 23.) However, Basu does not teach protocol processing means for processing protocol of image

information from the mobile terminal.

55.   Zhang teaches protocol processing means for processing protocol of image information

from the mobile terminal (Fig.4, reference characters 400 – 410; col. 9, lines 60 – 63.)

56.   It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Basu with Zhang for the reasons given above in paragraph

11.

57.   The combination of Basu and Zhang fails to teach an image information conversion

processing means for converting the image information into a common image information

format; a storage unit for storing converted image information; a storage unit controlling means

for controlling to store the image information into the storage unit and to read stored image

information; or an image information custom processing means for editing the image information

into the image information which is suitable for respective mobile terminals, wherein the image

information read from the storage unit is supplied constantly to the mobile network to deliver

broadcast.

58.   Shaw teaches an image information conversion processing means for converting the

image information into a common image information format (col. 3, lines 62 – 65); a storage unit

for storing converted image information (col. 3, line 38, 64 – 65); a storage unit controlling

means for controlling to store the image information into the storage unit and to read stored

image information (col. 7, lines 43 – 47); and an image information custom processing means for

editing the image information into the image information read from the storage unit which is

suitable for respective mobile terminals (col. 3, line 65 – col. 4, line 5.), wherein the image

information read from the storage unit is supplied constantly to the mobile network to deliver

broadcast (col. 4, lines 36 – 39.)

59.   It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Shaw with the combination of Basu and Zhang because

Shaw's converstion, storage, and custom processor improves the efficiency of the apparatus

(Shaw, col. 1, lines 49 – 53.)

60.   As to claims 15 and 30, Basu teaches an Internet interface means for establishing an

interface with the Internet (col. 3, lines 32 – 35.) However, Basu does not teach protocol

processing means for processing protocol of image information from the mobile terminal.

61.   Zhang teaches protocol processing means for processing protocol of image information

from the mobile terminal (Fig.4, reference characters 400 – 410; col. 9, lines 60 – 63.)

62.   It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Basu with Zhang for the reasons given above in paragraph

11.

63.   The combination of Basu and Zhang fails to teach an image information conversion

processing means for converting the image information into a common image information

format; a storage unit for storing converted image information; a storage unit controlling means

for controlling to store the image information into the storage unit and to read stored image

information; or an image information custom processing means for editing and processing the

image information read by the storage unit controlling means to meet a mobile communication.

64.   Shaw teaches an image information conversion processing means for converting the

image information into a common image information format (col. 3, lines 62 – 65); a storage unit

for storing converted image information (col. 3, line 38, 64 – 65); a storage unit controlling

means for controlling to store the image information into the storage unit and to read stored

image information (col. 7, lines 43 – 47); and an image information custom processing means for

editing and processing the image information read by the storage unit controlling means to meet

a communication (col. 3, line 65 – col. 4, line 5.)

65.   It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Shaw with the combination of Basu and Zhang because

Shaw's converstion, storage, and custom processor improves the efficiency of the apparatus

(Shaw, col. 1, lines 49 – 53.)

66.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Gregory L. Clinton whose telephone number is 703-305-3179.

The examiner can normally be reached on Monday - Thursday 8:00-5:30.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Meng-Ai T. An can be reached on 703-305-9678. The fax phone numbers for the

organization where this application or proceeding is assigned are 703-746-7239 for regular

communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is 703-305-3900.

Gregory Clinton
September 18, 2002

ZARNI MAUNG
PRIMARY EXAMINER